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## **Questions and Answers**

KYLE BROWN

Chair, IPS Horticultural Correspondence Committee Rt. 1, Box 2700, Glen St. Mary, FL 32040 USA

From: Enrique Voulminot Rambla Gandhi 685, Apt 901 Montevideo, Uruguay

Thanks for your time. I am planning to plant Washingtonia robusta on a vast area over white, non-salty sand dunes in my home country, Uruguay. The climate is similar to yours in Georgia.

I will use palm trees of about 15 cm (6 ins) tall cultivated in plastic pots of about 2 ins \* 2 ins \* 10 ins which I will plant randomly in the dunes for landscaping purposes. The palms will not be irrigated and I will try to fertilize them twice a year over the next two years. Our summers are often dry and winters get to -3.C.

- 1. Will W. robusta grow well in the white sand dunes?
- 2. Which is the best time to plant in the nursery? Do I plant the seedlings in early spring, autumn, summer?
- 3. Which is the best time for planting the palm trees? This year I tried late spring and the drought effects were terrible. I am afraid of planting in the winter.
- 4. If I am to transplant a grown-up palm tree from the sand, how would it behave? Would it be like bare-root transplanting?

If you have any books that you may suggest on this subject, please let me know.

In regard to your plans to use *Washingtonia* robusta, you must understand that this palm responds with good growth to the following conditions: warm to hot temperatures (60 to 70° F at night and 85 to 95° F daytime); high fertility soils; abundant water in the root zone.

I cannot recommend this species for the conditions which you described in your letter. As a matter of fact I cannot think of any palm that can be started in such conditions without irrigation.

It sounds to me like you have closer to California climate type than Georgia. Perhaps that is why you suspected *Washingtonia* would be a good choice. It is true that the species does grow well in California and is of course native in Mexico under similar climatic conditions. The critical thing to remember is that the plants grow around desert springs where their roots are in almost constant contact with water.

In response to your last question, if you ever were to grow a palm to maturity on pure sand transplanting would in all likelihood be "bareroot."

I am sorry to be so negative in my answers, but I do not want to see you spend a lot of time and money just to lose it all for lack of proper facilities. You must consider some sort of irrigation and I would recommend a low volume, low pressure drip system. If you will do this and fertilize them once a month during the warm season, I believe you can have success in your sand dunes.

From: Ms. Toni Santoni 31900 N. Marginal Rd., #125 Willowick, OH 44095

Can you please send me any information you may have on how to care for the 10" majesty palm tree. I bought this indoor plant approximately one month ago; I have researched everywhere and cannot find any information about this plant or how to care for it. I certainly would appreciate your help.

Your Majesty palm (Ravenea rivularis) should prove to be a good interior plant. No special treatment is required; however, a few things should be kept in mind. Give this plant as much light as possible, especially during the winter, even if it means supplemental artificial lighting (a combination of cool white fluorescent and incandescent is best). As for fertilizing you should use a good soluble product such as Peter's or Miracle Grow preferably with minor or trace elements. Use no more than once a month and dilute to one fourth the recommend rate. Water the plant thoroughly with the fertilizer solution. Additional watering should be done only if soil feels dry to the touch. Over watering kills more house plants than any other cause. Occasional soakings are much preferred to constant wetness. This palm is somewhat drought tolerant so don't worry if it dries out on occasion. Just be sure to rewet very thoroughly by soaking it overnight in a bucket of water. One other important item is to not "over pot" your plant by transplanting into a larger pot. Palms can tolerate having their roots pot bound with no ill effects. As a matter of fact it is a desirable condition because it tends to eliminate the possibility of over watering and will tend to slow down growth so the plant doesn't out grow its location too quickly. It is best to grow the plant in a container with drainage and a saucer but whatever the case don't allow it to stand in water.

I hope this information is helpful and I hope you have success in growing your palm.

From: Mark Cox

My name is Mark Cox and I live in northern Florida. I became aware of the International Palm Society from reading a palm book. I am in need of some information that I hope you can provide. I purchased two Ravenea rivularis (Majesty Palms) to plant outside. Will they tolerate the climate here in the Jacksonville, Florida area? In the winter we usually get a few nights when the temperature drops to the upper 20sF for a couple of hours. Once in a while it will go down to the lower 20's.

Do Syagrus romanzoffiana (Queen palms) tolerate colder temperatures than the majesty palm?

I also have nine Washingtonia robusta. Will Epsom salts be good for fertilizing them? What type of fertilizer would be the best for palm trees?

Thank you very much for any information that you can send to me.

We do not have a track record on how the Majesty palm will do outside in northeast Florida. No one that I know of has had the nerve to try. However, several people in the First Coast Chapter of IPS have said they are going to try it. You could be among the pioneers! I would recommend placing it in the most protected spot that you possibly can. From reports I have received, it appears that the queen palm is a little bit hardier than the Majesty palm but not by more than a few degrees.

Washingtonias do not normally require Epsom salts in north Florida. A better fertilizer for them would be a Palm Special available at most complete line garden centers.

From: Nikolaus von Behr
P. O. Box 08-762
70.312-970 Brasilia DF
Fone/Fax (061) 273 9195

- 1—Is it true that when some seeds of a bunch are mature, all the other seeds are too?
- 2—Is it true that you cannot dry palm seeds? Conserving them with the mesocarp keeps its fertility? How can you extend the fertility of a palm seed using cheap methods?
- 3—Which pesticides do you recommend to avoid pests in the seeds you store? Does it influence in germination? Low toxicity, please.
- 4—I want to know more about stocking palm seeds. Is there any article specifically about that in Principes? Can you send me a photocopy of this article.
- 5-Maybe you can send me a copy of other

answers sent to other palm growers like me, with simple questions about palm cultivation and seed storage?

Thank you very much for your kind attention. And congratulations for this wonderful service provided to IPS members. It makes me proud of being a member of IPS.

In the future you could publish a book with the most common questions sent by IPS members. This booklet could be a great success!

1. It is not universally true that all seeds in a bunch mature together. For most species of palms it probably is true. There are noteworthy exceptions, however, such as your native *Butia capitata* and the North American native *Rhapidophyllum hystrix*. Each species of interest must be researched to determine seed maturity and

2. It is true that you cannot dry palm seeds. This is the quickest and surest way to destroy viability. Seeds of some palm species can be kept viable for a few months by keeping them cool and moist. Again, this varies with each species. The best approach always is to collect seeds as soon as they are ripe and plant them as soon as possible. For additional information on seed storage, shipping and viability I suggest you contact the following individuals with specific questions on specific palm species:

Lynn Muir, IPS Seedbank Chairman 33802 Valencia Pl. Dana Point, CA 92629 USA

Seed Service Inge Hoffman 695 Joaquin Ave. San Leandro, CA 94577 USA

- 3 & 4. These same individuals can answer questions about pesticides and stocking of palm seeds.
- 5. I will investigate the possibility of coming up with a compilation of commonly asked questions about palm cultivation and seed handling.

From: Ronald Frick 3195 Moss Pointe Dr. St. Charles, MO 63303 I have a variety of house palms and always fight spider mites. Can you please recommend the best way to control them?

I am very interested in purchasing a book or so through the "Bookstore." Can you recommend one or two from the list for houseplant palms identification, care, watering, soil mixture, etc.?

Your help is greatly appreciated,

To control spider mites on your palms try an insecticidal soap such as Safer's. If that proves ineffective then try Mavrik Insecticide/Miticide. Both should be available at complete line garden centers in your area.

As for the best books on "housepalms" I suggest you contact the "Bookstore Lady" herself, Mrs. Pauleen Sullivan at the following address:

3616 Mound Ave. Ventura, CA 93003

Nobody knows the Bookstore like Pauleen! And good luck growing your palms indoors.

From: Richard Kennedy 2517 Danny Pk. Metairie, LA 70001

I have a couple of questions related to palm culture that I hope you can answer for me. I am neither a professional horticulturist, nor a botanist. I have belonged to the IPS for two years and to the Louisiana Chapter for three years. I am primarily interested in cold hardy palms suited for outdoor culture in Louisiana. I try to grow palms that are not commonly planted in here.

First, I have not had much luck germinating or raising Jubaea chilensis seeds. I have tried scarifying, soaking them in water, dipping them in sulfuric acid, treating them with gibberellic acid and stratifying them. Out of fifty seeds received in September of 1992, four germinated within six months, another seven germinated since then. Out of thirty seeds received in September of 1993, two have germinated, one of those has succumbed to disease. One of the seeds planted in September of 1992, sprouted in February of 1994 in a pot that was outdoors all winter. Temperatures had been as low as 30° F, daytime temperatures averaged in the 60's.

Seeds usually become available in September, and I want to try another batch this year. Can you recommend a method for planting the Jubaea seeds for maximum germination? I have facilities for keeping a limited number of planted seeds warm overwinter, but from my experience, I wonder if perhaps I should just plant them in pots, and leave the pots out of doors overwinter, protecting them only from severe frost?

I have seven surviving Jubaea at this time. I suspect they do not like heat, high humidity and being wet so can you recommend a fungi-

cide and soil mix for growing Jubaea.

Next, I have many seedlings of various species of palm trees I have grown from seeds that I want to set out in a field. I have ten acres, more or less, to plant on. I want to get the most trees per acre without placing the trees so close together that they will not obtain full size at maturity. Is there a rule of thumb to go by for spacing seedlings? I was considering 1.5 times the diameter of the crown of a mature tree, or perhaps twice the diameter. Would there be a difference in size and age to maturity, for trees planted according to the targeted spacing, if cultural practices were intense, average or minimal? In other words, I want to get the maximum number of fine specimens out of the least amount of space. How far apart should I plant the trees?

I sympathize with you on your attempts to grow Jubaea in Louisiana. My advice to you is to obtain as large a specimen as your budget will allow to be shipped from California. I am serious about this, based on our own attempts and those of several very good palm growing friends here in north Florida. We have all tried various soil mixes and all of the good fungicides, such as Truban, Banrot, and even Benlate before the crisis. We have all been able to germinate the seeds but the seedlings soon go into a decline which is irreversible. I am certain this is due to the climate we have on the Gulf Coast. I am sorry but there are some things that are not possible to overcome even with the best of normal effort.

As to your second inquiry, I recommend that you place your trees no more than the anticipated mature diameter apart. In most commercial growing fields they are placed much closer than that; however, "harvesting" is begun before trees reach maturity leaving space for those trees that are left to mature. Do not hesitate to use intense cultural practices as the unit diameter spacing. Good luck in your venture.

From: Wayne Ward Begonia 200, Col. Montealegre Tampico, Tam. 89210 Mexico

I live on my ranch in northeastern Mexico, about 30 miles NW of Tampico, Tamaulipas.

I'm having a lot of trouble with Rhinoceros beetles. These are a shiny purplish black color. I think they are Oryctes rhinoceros, but I'm not sure. I can't find any literature on them.

I've always had a slight problem with them in my maguey plants that I have scattered around, but now they're getting into my good palms, as well as native palms and bougainvillea.

I think they're worse now because we had a totally unexpected 12" of rain in January, normally a dry month. Our rainy season is usually from the 10th-20th of June thru September, with an average rainfall of 40".

I would appreciate it if you would send me your recommendations for control of this beetle

because they are becoming BAD.

I've been trying to control them by digging them out, but it's very difficult to catch them. I've dug out about 150 so far.

I know that palms are sensitive to a variety of insecticides, so I'm afraid to try a shotgun

approach.

There is no way that I can rely on sanitation and cultural practices. I live in a clearing of about 2 hectares completely surrounded by jungle full of decomposing plant material. I've dug thru piles of leaves and limbs, but I've been unable to find any larvae.

I would prefer to use something which I can pour around the trunks that would repeal them.

And also, of course, something to pour in the holes to kill the ones already there.

They've killed a beautiful 3 meter + Chrysalidocarpus cabadae, and a 2 meter tall Latania loddigesii. I'm getting desperate! Hence my cry for help!

Hoping to hear from you real soon . . .

Your rhino beetles should succumb to any of several common insecticides, but I must warn you the adult beetles will be more resistant than the larvae. Malathion is the least toxic chemical I can think of, however, Dursban, Diazinon, and Cygon would also be effective. All of these have proved to be safe on palms but keep in mind that Cygon is systemic so don't use it on any palm you would harvest any parts of for human or animal consumption. All of these can be applied as a soil drench or sprayed directly into tunnels or bore holes.

I hope you get relief soon.

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### **CHAPTER NEWS AND EVENTS**

### **PACSOA News**

Palms & Cycads, the journal of the Palm and Cycad Societies of Australia (PACSOA), recently announced the PACSOA Directors to serve for 1995–1997. They are Leo Gamble, Tom Turner, Ted van Ginneken, Cheryl Basic, Jeanne Price, and Lou Randall (all returning from 1993–1995 period). They join the 1994–1996 Directors: David Tanswell, Greg Cuffe, Stan Walkley, Paul Anderson, John Dowe, Will Kraa, and Rolf Kyburz. PACSOA held their Annual General Meeting on May 29, 1995, at the Bread House, Gregory Terrace, Brisbane.

PACSOA at the end of 1994 has almost 1,300 members. Palms & Cycads is a 28–40 page A5-sized journal with color covers and additional color interspersed throughout. In addition to news items and meeting announcements, the October–December 1994 Palms & Cycads issue featured articles on Guihaia argyrata, Polyandrococos pectinata, Loren Whitelock's "Around the World in Search of Cycads" and "Palms and Cycads on Postage Stamps" by Dennis Johnson, each lavishly illustrated in color.

PACSOA now accepts Visa and MasterCard as forms of payment for memberships/subscriptions, PACSOA Bookstore orders, and PACSOA Seed Bank orders. This makes it very easy for non-Australian members to participate in these services. For additional information, contact PACSOA, P.O. Box 1134, Milton 4064, Queensland, Australia or fax 61-7-298-5088 from outside Australia.

## News from Sydney Branch, PACSOA, Chapter

The Sydney Branch of PACSOA (and affiliated chapter of the IPS) met on May 16 at the Royal Botanic Gardens in Sydney. Simon Leake, an agricultural scientist, founder and director of the Syd-

ney Environmental Soil Laboratory, spoke on potting mixes. The Laboratory also offers soil testing services.

# News from Gold Coast-Tweed (Australia)

The Gold Coast—Tweed Palm & Cycad Society of P.A.C.S.O.A. held their Annual General Meeting on April 9 to tour the nursery of Rolf Kyburz at K-Palms. Rolf is one of Australia's leading importers of palm seeds. He also travels extensively in search of palms—having made several trips to Madagascar and a recent trip to Venezuela and Cuba.

The June meeting was held on Sunday June 11 at the property of the new local society president, Phil Thomas, in Mrwillumbah.

### News from North Queensland

The North Queensland Palm Society (NQPS) met on March 13 at Tumbetin Lodge, The Palmetum. Guest speaker was Tony Huntington, who gave a presentation on his recent trip to Hawaii. Videos were shown of the Alii Gardens of Hana, Lyon Arboretum, Waimea Falls Park and the Foster Botanic Garden. The beautiful scenery and beaches were reminiscent of tropical North Queensland. After dinner, Lorraine Tooth gave an enlightening address on a selection of cycads brought to the meeting from her collection. John Dowe then held the group's attention while he described a number of rare palm species brought in by members. These included Licuala elegans and L. cordata from Chris Gray's collection. John also described the different leaf form of cultivated Ptychosperma macarthurii as compared with those growing in their natural habitat.

Chris Gray, local society President, recently